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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/720,250	01/08/2001	Masanori Nanbu	P20453	5867
7055 7590 04/19/2004 GREENBLUM & BERNSTEIN, P.L.C. 1950 ROLAND CLARKE PLACE RESTON, VA 20191			EXAMINER CABRERA, ZOILA E	
			ART UNIT 2125	PAPER NUMBER

DATE MAILED: 04/19/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

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## Office Action Summary

Application No.

09/720,250

Applicant(s)

NANBU ET AL.

Examiner

Zoila E. Cabrera

Art Unit

2125

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 27 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-42 is/are pending in the application.
- 4a) Of the above claim(s) 1-30 and 37-42 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 31-36 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-47 are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 3, 4.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

***Election/Restrictions***

1. Applicant's election of Group VI, claims 31-36, in Paper No. 6 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 35-36 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 35-36, the phrase "or the like" renders the claim(s) indefinite because the claim(s) include(s) elements not actually disclosed (those encompassed by "or the like"), thereby rendering the scope of the claim(s) unascertainable. See MPEP § 2173.05(d).

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent

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granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 31 and 34 are rejected under 35 U.S.C. 102(e) as being anticipated by **Nakajima et al. (US 6,338,000)**.

Regarding claims 31 and 34, **Nakajima** discloses a machining possibility calculating apparatus comprising:

- marketing object data input means which inputs marketing object data including shape data of a predetermined marketing object specified by a shape pattern and size parameters of a marketing object to be designed (Col. 5, lines 9-12; Col. 4, lines 66 – Col. 5, line 3), structure data of the marketing object (Col. 5, lines 15-19), and material quality data (Col. 5, lines 13-14); material data input means which inputs material data including features of material to be machined by the marketing object (Col. 5, lines 12-19, i.e., material properties, including a weight of a product manufactured on the basis of the design data); and machining verification means which verifies whether or not the marketing object to be designed is capable of being machined on the basis of the input marketing object data and material data (Col. 5, lines 28-33 and 44-65; Fig. 1, elements 12, 14, 22; Col. 5, lines 1-3, i.e., storage unit 12 stores design data of automobile bodies; Col. 5, lines 13-19, production technique requirements data 14 stores material properties, including weight of a product manufactured on the basis of the design data, conditions due to structural limitations of dies for manufacturing the

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product, and the shape of hemmed edge; Col. 5, lines 28-33 and 44-65, element 22 performs various verifying processes).

- the machining verification means performs the verification by checking consistency between the input size data pieces (Col. 5, lines 60-65; Col. 8, lines 33-38).

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 32, 33 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Nakajima (US 6,338,000)** in view of **Imazu Yoshiteru (JP 08-155560)**.

**Nakajima** discloses the limitations of claim 31 above but fails to disclose the limitations of claims 32, 33 and 35. However, **Imazu** discloses such limitations as follows:

- the features of the material to be machined includes the plate thickness and the material quality of a plate material (Constitution, lines 2-3, i.e., work data of plate thickness, material detail, ...);
- the machining verification means performs the verification by comparing the resisting pressure of the marketing object obtained according to strength calculation from the marketing object data and machining requiring pressure

necessary for machining which is performed by the marketing object which has been obtained from the material data with each other (Constitution, lines 3-10; Purpose, lines 1-5, i.e., operating required pressure beforehand based on data of a die and work and controlling by a pressure regulator so that the operated pressure is obtained at the moment of pressing)

- the marketing object to be designed is a die for machining of a predetermined kind such as punching or the like, the marketing object data includes structures and material qualities of a punch and a die, and a clearance between the punch and the die (Purpose, line 1; Constitution, lines 1-3, i.e., die data of shape, dimension, etc., and work data of plate thickness, material detail,...).

Therefore, it would have been obvious to a person of the ordinary skill in the art at the time the invention was made to combine the teachings of **Nakajima** with the teachings of **Imazu** because it would provide a method of verifying, highly easily and reliably, taking into account production technique requirements (**Imazu**, Col. 3, lines 30-33).

5. Claim 36 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Nakajima (US 6,338,000)**.

**Nakajima** discloses the limitations of claim 31 above and further discloses a shape data generator, an angle analyzer, a curvature analyzer and a distance analyzer (Fig. 1, elements 36, 40 and 42). **Nakajima** also discloses "if a part is required to take into account the maximum curvature that can be produced by dies, then the maximum curvature is set up as a decision reference value for the part based on production

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technique requirements data" (Col. 8, lines 53-57). However, **Nakajima** does not disclose the marketing object to be designed is a die apparatus for machining of a predetermined kind such as bending or the like, the marketing object data further includes a tip end R, a tip end angle of the die, and a V width of the die. But it would have been obvious to a person of the ordinary skill in the art at the time the invention was made to take into account a tip end R, a tip end angle of the die, and a V width of the die as a decision reference value to manufacture a part because it would provide a method of verifying easily and reliably, the curvature of an arbitrary curved line on a shape which is composed of shape data of a product (**Nakajima**, Col. 3, lines 34-37)

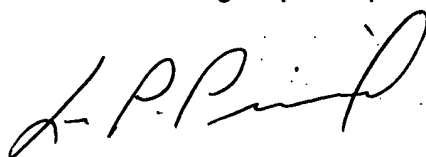
### **Conclusion**

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning communication or earlier communication from the examiner should be directed to Zoila Cabrera, whose telephone number is (703) 306-4768. The examiner can normally be reached on M-F from 8:00 a.m. to 5:30 p.m. EST (every other Friday).

If attempts to reach the examiner by phone fail, the examiner's supervisor, Leo Picard, can be reached on (703) 308-0538. Additionally, the fax phones for Art Unit 2125 are (703) 872-9306. Any inquiry of a general nature or relating to the status of this application should be directed to the group receptionist at (703) 305-9600.

Zoila Cabrera  
Patent Examiner  
4/15/04



**LEO PICARD**  
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